

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AF
2709

Applicant: Mark S. Boddy et al.

Title: AUTOMATED FINITE CAPACITY SCHEDULER

Docket No.: H16-17367 (256.029US1)

Filed: November 6, 1998

Examiner: Steven Garland

Serial No.: 09/188399

Due Date: March 26, 2004

Group Art Unit: 2125



RECEIVED

MAR 31 2004

Technology Center 2100

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.
 Reply Brief (4 Pages)(in triplicate).

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 000128

By: Bradley A. Forrest
Atty: Bradley A. Forrest
Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26 day of March, 2004.

Gina M. Uphus

Name

Signature

A handwritten signature in black ink that appears to read "Gina M. Uphus".

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Mark S. Boddy et al.)
Serial No.: 09/188399)
Filed: November 06, 1998)
For: AUTOMATED FINITE CAPACITY SCHEDULER)
Examiner: Steven Garland
Group Art Unit: 2125
Docket: H16-17367 (256.029US1)

#23

C.Ba
571964

REPLY BRIEF UNDER 37 C.F.R. § 1.193(b)

RECEIVED

MAR 31 2004

Technology Center 2100

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

This brief is presented in reply to the Examiner's Answer mailed January 26, 2004 in the above-identified patent appeal. Entry of this Reply into the above-identified patent application is respectfully requested for review by the Board of Patent Appeals and Interferences.

The Reply Brief is filed in triplicate. If additional fees are needed, please charge Deposit Account No. 19-0743.

revised
srw

RESPONSE TO EXAMINER'S REPLY

The Examiner's Answer characterizes Goldman et al. as teaching "resizing and use of constraints in figure A, and pages 52-55." This characterization is respectfully traversed. Figure A does not describe resizing activities, or even resizing a recipe. It simply shows a recipe, and how that recipe is performed at a site using two units, a pre mixer and a reactor. Claim 1 specifically describes a list of activities required to accomplish tasks that are to be scheduled, and then modifying selected activities into sets of smaller activities. It is clear that Goldman is referring to a specific recipe, not a list of activities to accomplish tasks.

Pages 52-55 of Goldman et al. also does not describe resizing of activities. Goldman et al., describes selecting different batch sizes, not resizing activities. It describes that "generating a schedule involves choosing recipe, batch size and number batches, resource assignment, and activity ordering." "For any production order, the scheduler (either human or automated) must choose a set of batches to meet the order." (Page 52). The size of batches are selected based on either vessel size limiting the size of the batch, or "information about minimum/maximum and preferred sizes of production runs". (Page 53). Once the size of batches are determined, then they are turned into activities to be scheduled. Goldman et al. indicates that "schedules are constructed through iterative refinement, in which activity-ordering decisions correspond to constraining an activity either with respect to another activity or with respect to some timeline." (Page 54). Claims 1, 19 and 27 of the present application indicate that these activities can then be modified. There is no such teaching in Goldman et al., and the rejection should be withdrawn.

With respect to the rejection of claims under Zweben et al. in view of Tanaka, on page 6 of the Examiner's Answer, the applicant is directed toward Col. 16, lines 4-61 of Zweben et al. in regards to the splitting aspect. Lines 52-54 refer to a task that can be split into subtasks in view of a preemptive constraint. In the embodiment described, a 16 hour task is split into two 8 hour subtasks to address a labor constraint. Claims 1, 19 and 27 all refer to lists of activities required to accomplish a task, and then modifying the activities into sets of smaller activities. This clearly requires a division of activities, not tasks as described in Zweben et al., and the rejection should be withdrawn.

With respect to the rejection of claims 14 and 28, the rejection has not clearly identified each and every element of the claims. Both independent claims 14 and 28 represent activities by discrete and continuous constraints, and represent scheduling decisions as discrete and continuous constraints, and then consider the integrated implications of such constraints. The rejection does not describe where scheduling decisions are represented as discrete and continuous constraints as claimed.

CONCLUSION

A favorable Decision from the Board of Patent Appeals and Interferences is respectfully requested. If additional fees are needed, please charge to Deposit Account 19-0743.

Respectfully submitted,

MARK S. BODDY et al.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER &
KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402

Date 3-26-2004

By



Bradley A. Forrest
Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24 day of March, 2004.

Name

Gina M. Uphus

Signature

